Developing a Fire Training Certification Program for Nightclub Staff in Nashville

Executive Analysis of Fire Service Operations in Emergency Management

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Abstract

The problem was the lack of fire prevention, protection and suppression training of nightclub staff in Nashville.

The purpose of this applied research project was to develop a fire training certification program for nightclub staff in Nashville.

Using action and descriptive research, the researcher answered these three questions:

- 1) What type of training is currently required for nightclub staff in Nashville?
- 2) What type of training should be conducted for nightclub staff in Nashville?
- 3) What type of training do other cities require for nightclub staff?

The procedures used in this applied research project included a review of literature interviews, and an external survey that was used to help determine what type of training should be required for nightclub staff.

Results showed several taskforces that identified the need to train and educate nightclub staff; the external survey revealed that most nightclub staff accept a position without considering or knowing how to keep patrons safe during an emergency situation.

Recommendations include training nightclub staff with the guidelines set up by both Minneapolis and Philadelphia fire department in how to keep patrons safe before and during an emergency using the acronym (RACE).

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Introduction

Although the fire service is driven by the crises of the moment, terrorism, there is another terror here in the United States (US) that has already challenged us before and still continues too, fires in assembly occupancies, specifically nightclubs. Nashville, commonly known as Music City U.S.A. has more than 10 million visitors every year, most taking advantage of the many different music venues available. Coming to Music City and not patronizing one of the many nightclubs around the city to either hear or play music, is like going to Disney World and not seeing Mickey Mouse. Taking a look at what has already occurred and will occur again without proper planning, the Nashville Fire Department (NFD) may well be faced with the unthinkable and challenging task of combating a nightclub fire.

American fire officials in the U.S. have been re-evaluating fire and building codes for assembly occupancies, specifically nightclubs, since the two most recent tragedies that occurred during the same week. In Chicago, Illinois, 21 patrons died from a stampede at the E2 nightclub and in West Warwick, Rhode Island, 100 patrons died from a fierce nightclub fire at The Station, in 2003. The West Warwick, Rhode Island fire was the fourth deadliest nightclub fire in U.S. history. The deadliest nightclub fire occurred in 1942 at the Cocoanut Grove in Boston, Massachusetts where 492 staff and patrons died.

In "Fire Safety in the Spotlight" Benini and Vatner (2003) note, "Since the deadly Feb. 20 nightclub fire in West Warwick, R.I., many safety officials around the country are re-evaluating fire codes and upping inspections in indoor venues" (p. 22). Even with unannounced fire inspections and the progress that has been made in fire prevention-sprinkler systems, alarms, detection devices, code changes and increased awareness-

assembly occupancies still pose a high potential for loss of life.

Even though, according to Hall (2004), "The assembly fire problem is neither as severe as it tends to seem in the immediate aftermath of one of these horrific tragedies nor as thoroughly tamed as it can seem in the often lengthy intervals between such incidents" (p. 8). Still, patrons are entitled to know that management and staff can respond in an appropriate and responsible manner to handle any type of emergency situation in the nightclub, including fires.

Therefore, it seems the biggest problem the fire service faces today in nightclubs is the serious lack of educational training in fire related incidents for all nightclub staff. Failure to adequately address the issue of properly training nightclub staff will result in the lack of knowledge, skills and ability for them being able to control and manage different fire situations. Without properly training nightclub staff, the possibility for another nightclub tragedy still exists in Nashville.

The problem is a lack of fire prevention, protection and suppression training of nightclub staff. In "Systems Approaches to Property Classes: Assembly Occupancies," according to Harrington (2003), "Employees of assembly occupancies are critically important to the life safety of patrons. If the staff is trained properly, it can prevent serious injury or death to many patrons" (p. 37). In an attempt to minimize the risk of another nightclub tragedy, training staff to be more aware and how to handle fire prevention, protection and suppression activities could affect the overall safety of patrons and staff.

In the past, the tragic fires occurring in assembly occupancies have played a major role in the area of fire prevention. Looking back over the history of the American Fire

Service from 1648-1998, Brannigan and Carter (1998) in "Fire Disasters: What have we Learned" state, "some of our greatest progress has occurred just after someone's town was devastated or many lives were lost" (p. 76). Brannigan and Carter (1998) also write, "There are also a number of classic fires in places of public assembly that have led to upgrades in fire and life safety" (p. 80). In "Summary of Code Changes," the 10 deadliest nightclub fires in U. S. history have been studied by the National Fire Protection Association (NFPA) to determine the "factors contributing to the loss of life" (NFPA Online, 2004). After each tragedy, new fire and life safety issues were addressed resulting in steps to provide occupancy limit requirements, exit doors that swing in the direction of egress with panic bars and emergency lighting. Having two separate means of egress and keeping exits clear, along with not using combustible materials for decorations or in building components, have been other lessons learned from tragic fires of the past.

The purpose of this applied research project was to develop a fire training certification program for nightclub staff. Using action and descriptive research, the researcher answered these three questions:

- 1) What type of training is currently required for nightclub staff in Nashville?
- 2) What type of training should be conducted for nightclub staff in Nashville?
- 3) What type of training do other cities require for nightclub staff?

Background and Significance

The NFD serves a city of approximately 580,450 people in a 533 square mile area. There are approximately 1,260 personnel in the NFD separated into five bureaus. Three bureaus provide planning, mitigation, response and recovery efforts for the city. The Nashville Fire/Emergency Medical Services (EMS) Bureau is the largest bureau in

the Department with approximately 980 personnel separated into six divisions:

Fire/EMS, Urban Search and Rescue (USAR)/Technical Rescue, Special Hazards/Water

Rescue, Health and Safety, Fire/EMS Response, and Research/Inventory. Approximately
another 200 personnel in the Paramedic/EMS Bureau are separated into four divisions:

Paramedic, Quality Improvement, Billing and EMS Supply Logistics.

Currently, the Fire Prevention Bureau consists of 40 employees responsible for the development and enforcement of fire codes to protect life and property in Nashville. Nashville is divided into 12 inspection zones, with inspectors assigned to each zone that are responsible for all new construction inspections and existing building inspections that are done on a priority based rotating schedule. A few inspectors are also assigned to specialized occupancy inspections: hospitals and nursing homes, schools, day care centers, and industrial inspections. Other inspectors are assigned to review new construction sprinkler plans and also conduct installation inspections, review new construction plans and follow up on code compliance during construction and test all fire protection systems prior to occupancy approval. Several fire investigators are responsible for investigating every structure fire that occurs.

Over the past 40 years the NFD has operated under NFPA 1, *Fire Prevention Code*, as the fire code, and NFPA 101, *Life Safety Code* which is adopted by reference. According to the Fire Marshal of the NFD, Danny Hunt, Nashville has typically been ahead of adopting the fire and building codes that the state of Tennessee adopts. However, due to recent budget cuts, the NFD is still currently under the 2000 edition of NFPA 1, *Fire Prevention Code* even though the State has adopted the 2003 edition. Another difference between the NFD and State is in the building code. Even though the

first model building code is currently available, NFPA 5000, *Building Construction and Safety Code*, 2003 edition, neither the State or Nashville has adopted it. Nashville operates under the 2000 edition of the *International Building Code* while the State operates under the 1999 edition of the *Standard Building Code*. (personal communication November 8, 2004).

In the past, the Fire Prevention Bureau was able to inspect every district in a year's time. Even nightclubs that could not be inspected during the day were inspected at night on an annual basis. Nightclub inspections became a priority in 2003 and required the use of fire suppression personnel on shift to conduct unannounced late night inspections of all nightclubs in their district by completing a fire safety survey (Appendix I). Also, it was decided by the last Fire Marshal, as the authority having jurisdiction to allow the Fire Prevention Bureau to supervise assembly occupancies with a load limit over 5,000 patrons. However, the Fire Prevention Bureau no longer provides personnel at assembly occupancies, but they do require proof of their staff being trained as crowd managers. Because inspections are based on a rotating priority schedule, which is based on recent fire history in Nashville, the current priority is on nursing homes and apartment complexes. (D. Hunt, personal communication, November 8, 2004).

In the United States Fire Administrations report on "Nightclub Fires in 2000" the writer states, "Following the Rhode Island nightclub fire, many local jurisdictions across the country reviewed their fire safety codes or increased inspections of local nightclubs to enforce existing codes" (p.1). Even though fire suppression personnel conducted unannounced nightclub inspections throughout the city during peak times on weekends for several months, this is no longer the practice.

According to the Assistant Fire Marshal, Maggie Lawrence, nightclubs are currently checked after certain circumstances, after a known code violation, when going before the beer board for a license, after a change of ownership or if the nightclub is brand new. Lawrence also stated if a nightclub has been closed for more than three months, it must be inspected before reopening and must comply with the current building/fire codes even though it is an existing building. A new 8x11 inch occupancy limit sign (Appendix K) is now used for easier visibility in Nashville. (personal communication, November 8, 2004).

Yearly Fire Prevention Bureau records indicate that blasting complainants are received more than any other complaint. Although less frequent, nightclub complaints are second in occurrence, usually depending on what time of year and what type of events are taking place in Nashville.

In the future, Nashville could benefit by properly training nightclub staff in fire prevention, protection and suppression activities. In "Fire Emergency Procedures for Public Assemblies" the writer states:

Well-trained employees are critical to the successful evacuation of a public assembly. Employees must receive emergency evacuation training as part of new employee orientation, and annual training thereafter. Employees should be familiar with fire alarm signals, and safe use of portable fire extinguishers. (Seattle Online, 2004)

How the NFD prepares nightclub staff to think, how to react and what to do during an emergency is very important to the health and safety of all patrons.

In December 1987, at a Public Enemy concert in Nashville, two teenage girls were crushed to death and 26 others injured during a post-concert stampede. Goldsmith and Williams (1987) reported, according to security guard, Brent Riley, "They still had the damn chains on the door.... It was like stampeding a bunch of cattle into a cement corral – no air, no way to escape" (p. A1, A4). The NFD put a city-wide disaster plan in effect during the emergency incident, which involved the transport of patients to eight different Nashville hospitals. The different types of emergencies in the future may or may not be considerably larger or worse, but they are likely to be as complex and require different governmental and outside agencies to help with preparation, mitigation, response and recovery efforts. In "Rhode Island: The Station Club Fire After-Action Report: State, Local and Federal Government and the Private Sector" it states, "When a significant disaster occurs, regardless of its cause, local governments with jurisdictional authority are first to respond. But in the aftermath of many major disasters, state and Federal resources are required to supplement those available to local governments" (LLIS Online, 2004). The recommendations made in the report can be used to improve planning, mitigation, response and recovery efforts during and after an emergency.

This applied research project is related to the National Fire Academy's Executive Analysis of Fire Service Operations in Emergency Management course in Unit Three on Community Risk Assessment/Capability Assessment. One objective of Unit Three was to conduct a community risk assessment that identifies and assess the critical hazards and vulnerabilities in a typical community. This research project also supports the United States Fire Administration's goal "to promote within communities a comprehensive, multi-hazard risk reduction plan led by the fire service organization" (NFA, 2003, II-2)

by creating a fire training certification program for nightclub staff in fire prevention, protection and suppression activities. Although nightclub tragedies occur infrequently, they still require the fire service to use all the resources available locally, state wide and at the federal level.

Creating a certification program for nightclub staff will help prepare them to reduce the chances of another tragedy caused by fire. The writer points out in "Places of Public Assembly: A Tragic History" that, "Fire safety is still misunderstood in our Nation, and I believe education is paramount in trying to prevent the long line of disasters that have plagued places of public assembly...Those who fail to learn the lessons of history are condemned to repeat the mistakes of the past" (Securitysense Online, 2004). Educating nightclub staff is the key to fire prevention. Mistakes in how nightclub staff handle an emergency situation can have deadly consequences.

Literature Review

A review of pertinent literature from various sources helped to establish the fire prevention, protection and suppression training needed for nightclub staff. These sources included national standards, professional journals, Internet, books and Executive Fire Officer papers. An external survey helped identify what nightclub staff in Nashville consider important in creating a fire training certification program.

NFPA 1, *Fire Prevention Code* (2003) defines an assembly occupancy as, "An occupancy (1) used for a gathering of 50 or more persons for deliberation, worship, entertainment, eating, drinking, amusement, awaiting transportation, or similar uses; or (2) used as a special amusement building, regardless of occupant load" (p. 1-13).

Nightclubs fall into this definition and the *A to Z Dictionary* defines a nightclub as "an establishment for evening entertainment, generally open until the early morning, that serves liquor and usually food and offers patrons music, comedy acts, a floor show, or dancing" (Infoplease Online, 2004).

Fires in assembly occupancies, especially nightclubs, pose a threat in any city in the U. S. Five of the 20 deadliest fires in U.S. history have occurred in nightclubs.

Nightclub fires listed in order of most deaths include the following: the 1942 Coconut Grove with 492 deaths, 1940 Rhythm Night Club with 207 deaths, 1977 Beverly Hills Supper Club with 165 deaths, 2003 Station Nightclub with 100 deaths and 1990 Happy Land Social Club with 87 deaths.

Ever since the tragic 1911 Triangle Shirtwaist Factory Company fire in New York City killed 146 people, work began on improving fire/building codes in the U. S. According to Corbett and Farr (2003), "It led the National Fire Protection Association (NFPA) to form the Committee on Safety to Life, which eventually developed what was to become NFPA 101 Code for Safety to Life from Fire in Buildings and Structures" (p. 1040). The work to improve the current fire and building codes was started by what is now known as NFPA 101, *Life Safety Code*. In "Commitment to Safety" Nicholson (2003) states, "NFPA's history of fire protection is full of our industry experts learning from devastation and making a commitment to saving life's through enhanced codes and standards" (NFPA Online, 2004). Since that time, changes in both fire and building codes have significantly improved the safety of most assembly occupancies, including nightclubs.

Places of assembly were redefined in the 1976 edition of NFPA 101, *Life Safety Code* as:

Places of assembly include, but are not limited to, all buildings or portions of buildings used for gathering together 50 or more persons in commercial places of assembly and 100 or more persons in commercial places of assembly. Places of assembly shall include those facilities used for such purposes as deliberation, worship, entertainment, amusement, or awaiting transportation. (p. 101-73)

Places of assembly were also classified according to capacity.

The same edition had one code on drills that stated both employees or attendants in places of assembly to, "be schooled and drilled in the duties they are to perform in case of fire, panic, or other emergency in order to be of greatest service in effecting orderly exit of assemblages" (p. 101-196). During an occupied assembly, concern for having a proper number of trained employees on duty was stressed.

After a complete rewrite on new and existing assembly occupancies, chapter 8 and 9, and many comments from Code authorities on the need to define nightclub, the 1985 edition of NFPA 101, *Life Safety Code* defined nightclub as:

An establishment primarily engaged in the retail sale of beverages, which provides entertainment and where any service of food is incidental to the entertainment. Such establishments include, but are not limited to, cabarets, discotheques, beer gardens, show rooms and like establishments. (p. 101-36, 101-45)

This definition required the authority having jurisdiction to distinguish between restaurants and nightclubs to help enforce other code requirements for assembly occupancies, which had changed from places of assembly in previous editions.

Also in 1985, another code on drills was added that states, "Employees or attendants of assembly occupancies shall be instructed in the proper use of portable fire extinguishers and other manual fire suppression equipment where provided" (p. 101-169).

Crowd managers were first mentioned in the 1994 edition of NFPA 101, *Life Safety Code* for assembly occupancies, and it states "there shall be trained crowd managers or crowd manager supervisors at a ratio of 1 crowd manager/supervisor for every 250 occupants who shall have received approved training in crowd management techniques" (p. 101-228). Training crowd manager guidelines and techniques are found in the *Society of Fire Protection Engineers Handbook of Fire Protection Engineers*.

Although the 2000 edition of NFPA 101, *Life Safety Code* did not change the code on crowd managers and drills for assembly occupancies, the code did readdress occupant load by stating:

The occupant load, in number of persons for whom means of egress and other provisions are required, shall be determined on the basis of the occupant load factors of Table 7.3.1.2 that are characteristic of the maximum portable population of the space under consideration, which ever is grater. (p. 101-108)

However, the authority having jurisdiction can still establish the occupant load based on adequate egress.

In the 2003 edition of NFPA 101, *Life Safety Code*, the code for crowd managers changed for new and existing assembly occupancies and states, "The crowd manager shall receive approved training in crowd management techniques" (p. 101-112, 101-131).

NFPA Technical Committee on Assembly Occupancies proposed emergency code amendments to NFPA 101, *Life Safety Code* at a special called meeting in Boston, shortly after The Station Nightclub fire in West Warwick, Rhode Island and the Chicago E2 crowd crush incident. The committee also asked that portions of the NFPA 5000, *Building Construction and Safety Code* be reviewed. In "NFPA Codes to be more Stringent in the Wake of Disasters" it states:

The Standards Council of the NFPA recently issued amendments to the association's two key safety codes. Precipitated by nightclub tragedies in both Rhode Island and Chicago earlier this year, the amendments institute requirements that are believed at this time to be among the nation's most stringent. (p. 89)

These recommended changes known as, Tentative Interim Amendments (TIAs), would become effective immediately if approved.

These TIAs according to Nicholson, (2003) in "Commitment to Safety," would:

- Eliminate festival seating: unless certain requirements are met
- Crowd managers: require the use of crowd managers knowledgeable in public safety for all assembly occupancies and require the use of
- Increased usage of sprinklers: in existing nightclubs. (NFPA Online, 2004)

Reese (2004) writes in "If Onlys Become Never Agains," the secretary of NFPA's Standards Council States:

It's difficult for people not involved in codes and standards to understand how far-reaching these changes can be: they really do have an effect on tomorrow's world. Unfortunately, it often takes a disaster to serve as a wake-up call in the court of public opinion to make lasting changes occur. (p. 54)

With the crowd crush incident in Illinois and the fire in Rhode Island resulting in a number of deaths, fire and building codes have become critical issues for assembly occupancies, especially nightclubs.

In July 2003, at the NFPA Standards Council meeting in Portland, Oregon, they voted to make the "sweeping changes to the codes and standards governing safety in assembly occupancies." These changes included:

- Fire sprinklers in new nightclubs and similar assembly occupancies and in existing facilities that accommodate more than 100
- Building owners to inspect exits to ensure they're free of obstructions and to maintain records of each inspection
- The presence of at least one trained crowd manager for all gatherings, except religious services. For larger gatherings, additional crowd managers are required at a ratio of 1:250
- Prohibit festival seating for crowds of more than 250 unless a life safety evaluation approved by the authority having jurisdiction has been performed. (NFPA Online, 2004)

The new TIAs went into affect on August 14, 2003. Although these code changes are only effective between editions, they automatically become a proposal for the new edition of NFPA 101, *Life Safety Code* in 2006.

Another recommended practice found in the 2003 edition of NFPA 1620, *Pre-Incident Planning*, states that, "Pre-Incident planning in an assembly occupancy should also involve not only the emergency responders, but also administrators, event supervisors, and other staff members" (p. 15). The need for nightclub staff to adequately conduct pre-incident planning for assembly occupancies is vital for being able to focus on what they should know, what they should look for and what steps need to be taken if an emergency occurs.

Occupational Safety and Health Administration (OSHA) also has recognized standards concerning fire hazards in the workplace, under Title 29 of the Federal Regulations Part 1910 Subparts E and L. In standard 1910.39(b) on written and oral fire prevention plans it states, "A fire prevention plan must be in writing, be kept in the workplace, and be made available to employees for review. However, an employer with 10 or fewer employees may communicate the plan orally to employees" (OSHA Online, 2004). Ball (2001) in "Developing a Preparedness Plan" states, "Companies use different methods for developing preparedness plans, depending on the size of the facility, the number of employees, and the type of operations" (p. 82-83). No matter what the size or setting, because every nightclub contains all the essential elements to start a fire, proper planning and preparation should take place by the employer.

Even with the more stringent codes, a report produced in a cooperative study done by the United States Fire Administration (USFA) and the NFPA shows a different story for some. In "A Needs Assessment of the U. S. Fire Service" it states, "An estimated 20.9 million people (7%) live in communities where no one conducts fire-code inspections" (p. vi). Even in those communities without fire-code inspections, a fire in any assembly occupancy can have a devastating effect on the community. This shows a major need for planning, mitigation, response and recovery efforts before, during and after an emergency occurs utilizing any local, state and federal resources available.

Since the two nightclub tragedies in Chicago, Illinois and West Warwick, Rhode Island occurred within one week of each other, several taskforces have been put together to study the nightclub problems in their cities and states to come up with recommendations on how to improve the safety in assembly occupancies. McManus and O'Toole (2004) in "The Nightclub, Bar and Restaurant Security Handbook" write, "Preparing for an emergency requires that your staff be trained on how to recognize an emergency and what to do once a situation has been defined as an emergency" (p. 242).

In April of 2003, the Governor of Massachusetts directed the Secretary of Public Safety to create a Fire and Building Safety Task Force. Their final report "Safeguarding the Public from Fire: A Strategy for the Commonwealth" noted about The Station nightclub fire that, "the real tragedy is that the loss of life may have been prevented with enhanced code enforcement, training of nightclub staff, and the installation of sprinkler systems" (p. 2). One Task Force recommendation was that all buildings used for assembly occupancy should complete a "Fire & Building Safety Checklist" to receive a Certificate of Inspection and their liquor license. The Task Force further suggests that the checklist "should include questions on emergency planning, egress layout, overcrowding, fire protection systems, and employee training" (p.13). Waiting until a fire starts is not

the time to begin planning on how to handle putting the fire out and properly evacuating the patrons.

In "Making Rhode Island the Safest State" several recommendations made to the Commission during oral and written testimonies about education and training include:

- Workers, such as bouncers, should be trained in fire safety and crowd control
- Develop voluntary certification programs in public assembly (crowd) planning and control and offer this training to businesses and organizations within the state on a regular basis
- Establish mandatory fire safety training for operations of places of assembly
- Have public safety educational program for venue owners and operators. (p. 43)

Properly training nightclub staff is the key to future patron safety and without proper training, the next fire could likely result in another unnecessary tragic loss of life.

Virginia also put together the *Public Assembly Fire and Life Safety Task Force*, to study fire and life safety issues in nightclubs and other places of public assembly occupancies. One of the recommendations to improve safety was to, "Develop a statewide 'Safety in Public Places' public awareness campaign to educate...business owners/managers on becoming more aware of ones surroundings" (p. 26). Each business owner/manager plays an important role in assuring staff is made aware of potential problems.

Also in April 2003, after evaluating the nightclub situation in Philadelphia for the past 60 days, a Task Force presented a final report to the mayor. In Goldsmith (2003) "Report on Nightclub Safety" it recommended to, "Add a requirement to the Fire Prevention Code that at least one employee, trained and certified in fire safety, shall be on duty when a nightclub is open for business" (p. 10). Everyone associated with nightclubs should recognize they are at risk from fire problems and the need to properly train staff is vital to minimizing the risk of death and injury associated with fire.

All assembly occupancies in Minneapolis are required by the 2003 edition of the Minnesota State Fire Code to design and implement a Public Assembly Safety Plan. In "Safety Plan and Emergency Procedures for Assembly Occupancies" it states, "All employees shall be trained in the fire emergency procedures described in their evacuation and fire safety plans" (p. 7). It further states that the employee training program shall include the following areas: fire prevention training, evacuation training and fire safety training.

Minneapolis had their "Public Assembly Safety Plan" put to the test on February 17, 2003, the same night as the nightclub incident in Illinois that killed 21 patrons and just three days before the Rhode Island fire that killed 100 patrons. There were 120 patrons in the Fine Line Music Café when a fire occurred on stage causing 1.5 million in damage. Although the building was severely damaged, none of the patrons were hurt. Flynn reports in "Paying the Tab for a Safer Nightlife," that according to Minneapolis Deputy Fire Chief, Thomas Deegan, "the difference in this fire, and the reason no one was injured, was a trained staff at the Fine Line" (NFPA Online, 2004). Also in "Twin cities Nightclubs put Safety under Scrutiny," Riemenschneider writes, "the Fine Line

staff members escorted all of the nearly 120 patrons out of the building before the firefighters got there" (StarTribune Online, 2004). Although these nightclubs had similar incidents, there was a totally different outcome, because of the training received by nightclub staff.

When the President Bush signed into law the National Construction Safety Team Act in October 2002, the National Institute of Standards and Technology (NIST) was authorized to conduct research on any major building failures where there was a high loss of life to prevent it from occurring again. After partially reconstructing the stage area to assess the fire conditions in the nightclub and conducting sprinkler and un-sprinklered test, NIST was able to determine the tenability, fire growth rate, smoke obscuration and thermal conditions. NIST will release a document entitled, "Final Report of the Technical Investigation of The Station Nightclub Fire," to the general public very soon. (D. Madrzykowski, personal communication, January 4, 2005).

In 1998, the first nightclub and bar security training program was developed in San Diego, by National Security Consultants. According to Hospitality and Security Alliance, they state, "This training set the standard for education and training of nightclub and bar security workers" (Handsalliance Online, 2004). Fire safety, emergency procedures and evacuation roles are some of the topic areas they teach in their program. National Security Consultants also announced the beginning of the National Association of Nightclub Security Employees in September of 2003. In a forum message posted by club security on Nightclub and Bar Exchange it states, "there are currently no standards and no requirements for any training, the bar that the Association is going to set will be

very high" (Nightclub-business Online, 2004). However, it is unclear if this national association still exists.

In "Safe and Sound" Harrelson (2003) writes, at the National Bar Safety

Conference, President of Nightclub Security Consultants, Robert Smith, "stressed the importance of staff training and having the proper emergency equipment" (Nightclub Online, 2004). The overall goal of the conference was to develop national safety guidelines for nightclub and bar venues.

The threat of fires in nightclubs has not only occurred in the U.S., but has also occurred internationally in various foreign countries. Since 1970, five of the most deadly nightclub fires have occurred in Asia and four have occurred in Europe. On Christmas Day in 2000, the deadliest nightclub fire killed 309 people in a China disco. In "Christmas Day Blaze in China Kills 309" it states, "When fire broke out, the whole dance hall was suddenly thrown into chaos" (p. 3). Unsupervised evacuation of patrons during a nightclub fire can contribute to a high loss of life.

Even before the two nightclub disasters in the U.S. occurred, the United Kingdom (UK) was already taking steps to ensure patrons visiting nightclubs would be safer. On January 28, 1998, a Member of Parliament, Dr. Phyllis Starkey, purposed a bill to establish a national register of door supervisors, which would help ensure the safety in nightclubs. In her speech to the House of Commons in the U. K., she states:

More than 120 million people a year in Britain enjoy a good night out in night clubs and discotheques, and I understand that an equally large number enjoy a good evening out in the pub and that millions, especially young people go to concerts and festivals. At all those venues, door

supervisors, popularly known as bouncers, play a crucial role in public safety. If the public are to have confidence in those door supervisors, they must be trained, competent and honest. (Phyllisstarkey Online, 2004)

The bill established the need for a national register, national standards and national standards for local authority licensing schemes for door supervisors.

Between March 1998 and September 1999, a nationwide research project was conducted in the U. K. on the training and reregistering of all pub and nightclub door supervisors. In "Safer Doors Project," Walker (1999) points out that a door supervisor is "required to patrol the premises and to look out for fire hazards or suspicious packages, and need to be able to carry out basic emergency procedures if problems occur" (p. 7). Unsupervised evacuations can complicate matters in the event of an emergency evacuation.

In May 2001, The Private Security Industry Act obtained Royal Assent to create the Security Industry Authority (SIA). SIA became an independent body to raise the level of professional skills in door supervisors, by creating a personal licensing system that set and enforced training and competency standards. According to SIA Chairman, Peter Hermitage, "It's important people feel safe when they go out to bars, pubs and clubs. The new national license will ensure we have qualified, highly trained door staff in pubs, bars and clubs across the country" (ISIA Online, 2004). Officially launched in October 2004, door supervisors became one of the first groups to begin the licensing process.

In "A Nationwide Network for all Aspects of Security," a fire awareness course covers the following topics:

• Fire Classifications

- Fire Systems
- Elements of Fire
- Fire Extinguishers
- Evacuation Procedures
- Practical Demonstration on Extinguishing Fires
- Current Legislation. (Capes-uk Online, 2004)

This training course meets the current SIA and Health & Safety Executive regulations required in the U. K..

Reported in "Fire Precautions Regulations – what you need to know," the U. K. Fire Precautions (Workplace) Regulations 1997, under the sub heading of training and instruction it states,

All people regularly employed in a workplace should be aware of the risk of fire...they need to know what action should be taken in case of fire including:

- How to warn others...,
- the location and use of escape routes
- assisting visitors or members of the public
- the location of a nominated assembly point
- the use of the fire equipment provided
- how to summon the fire service. (Bounsfire Online, 2004)

However, a proposed Order that would replace both the Fire Precautions Act 1971 and the Fire Precautions (Workplace) Regulations 1997 is currently under review in the U. K.

Another country, Hong Kong, conducted a study on the fire safety aspects for karaoke establishments in May 1998 and December 1999. This helped to improve fire and public safety by establishing a new Bill. In "A Demonstration on Working out Fire Safety Management Schemes for Existing Karaoke Establishments in Hong Kong,"

Chow and Lui (2000) state some important provisions to be considered:

- A responsible fire safety manager should be appointed.
- Staff should be trained for surveillance of premises when open to the
 public and for taking specified actions on the occurrence of a fire such
 as rescuing occupants, protecting properties and assisting the fire
 brigade.
- An action plan should be prepared with well-defined duties for the staff such as reporting immediately to the fire brigade in case of fire and using extinguishers to suppress the fire sources.
- Regular fire drills should be held. (p.105)

These provisions are similar to the 2003 edition of NFPA 101, *Life Safety Code* requirements for assembly occupancy.

In summary, based on this review, the information obtained from the literature shows the need to train nightclub staff in fire prevention, protection and suppression activities. A number of previous nightclub fires have been well documented in the U. S. and internationally. Several common issues have been identified, including the need to properly train nightclub staff.

Procedures

The desired outcome of this research project was to create a fire training certification program for nightclub staff in Nashville. Action and descriptive research was used to guide the applied research project to help understand the answers for the three research questions. The research questions deal with the type of training currently required for nightclub staff in Nashville, what should be required and what type of training other cities require for nightclub staff.

Research began in September 2004 with a literature search at the National Emergency Training Center's Learning Resource Center. Literature reviews continued through December 2004 by the interlibrary loan process. During this time personal communication and online research was conducted. Books and articles in professional fire service journals were also reviewed.

A list of nightclubs from the Nashville Fire Marshal's office showed 327 nightclubs had been inspected last year. Some of the information on nightclubs included the following: addresses, occupancy loads, owner information and fire district location.

To get an overall view of the city's nightclub staff, the researcher chose to select those nightclubs by the most beer sold. The two main beer distributors in Nashville were contacted about providing a list of nightclubs that sold the most beer last year. Ajax Turner Company (Budweiser) and Det Distributing Company (Miller) both provided a list of where the most beer was sold, estimated in cases, at on-premise locations throughout city. The two lists were then combined by adding up the number of cases sold by each distributor to the nightclubs in the city. The researcher then listed all the nightclubs in order of beer sales.

The two beer distributor's lists were compared to identify the top on-premise beer sales. In order to identify the top 30 nightclubs the researcher chose not to include four on premise locations that actually finished in the top 30, because they do not fit the definition of a nightclub, which included the following: The Coliseum, Gaylord Entertainment Center, Opryland Hotel and Consolidated Services. Choosing the top thirty nightclubs allowed the researcher to identify almost 10 percent of all the nightclubs in Nashville and also allowed for a wide range of participation across the city.

A meeting with the top 30 nightclub managers to explain the reason behind the survey and to find out the number of employees was set up by the researcher. A survey was prepared for each staff member identified. The researcher attended each nightclubs' staff meetings, where surveys were distributed either before or after their shift and then collected them. Reason for the research was explained to each staff member present along with the process and purpose of the survey. All nightclub staff was given the opportunity to ask questions so they would better understand what was involved. A survey was given to management for any staff members who were not present and picked up at a later specified time. For the two nightclubs that had 175 employees, the researcher decided to leave the surveys with management so that they could be placed with employee checks. Three nightclubs were selected each week to survey and the entire process took 10 weekends to complete.

An external survey (Appendix A) was developed for the nightclub staff that worked at the 30 selected nightclubs in the city. The survey asked respondents, based on their experience, to help identify the need for developing a fire prevention, protection and suppression training certification program. Question 1 and 2 on the survey asked about

their sex and status of employment. Nightclub staff were asked in question 3, 4 and 5 about their number of years employed, age and current position. Staff was asked about the clubs emergency action plan in question 6. Question 7, 8 and 9 asked about the fire alarm panel, alarm system and the sprinkler system. The sound/signaling method and alternative exits were asked in question 10 and 11. Staff was asked if they had ever been in an emergency evacuation drill in question12 or trained in how to conduct an emergency evacuation in question 13. Identifying a meeting place after an emergency evacuation was question 14. Fire extinguisher use and training were asked in question 15 and 16. Question 17 and 18 asked the nightclub staff if they were trained in first aid or if they should be trained. Should nightclub staff receive fire training before being employed was question 19, and question 20 asked if they would be willing to go through training. The survey results are reported in the Appendix section: overall (Appendix B), bartenders (Appendix C), cooks (Appendix D), doorman (Appendix E), managers (Appendix F), servers (Appendix G) and others (Appendix H).

As with any survey, the experience of the respondent is crucial in interpreting the questions and formulating the response. An assumption was made that nightclub staff had some previous knowledge about fire related emergencies. The researcher attempted to list several important fire prevention, protection and suppression training requirements for nightclub staff in the survey to help show the need for developing a fire certification program.

Assumptions and Limitations

After talking with the Executive Vice-president of Ajax Turner Company and

Director of Sales at Det Distributing, it was assumed that the two beer distributors, together account for 95 % of all the on-premise beer sales in Nashville.

With 327 nightclubs in the city, it did pose a problem for the researcher in identifying which ones to survey. It is not known if choosing to select nightclubs by the most beer sold allowed the researcher to survey the nightclubs with different occupancy loads. However, the 30 nightclubs chosen varied in occupancy loads from 50 to 3,000 patrons.

It was also assumed to include Hooters in on the survey since they are considered an occupancy assembly, not necessarily a nightclub, mainly because they have two establishments that finished in the top 30 category of on-premise beer sales.

One limitation was having management support in getting staff to take part in the survey. Several of the nightclubs selected had been closed down for a night after the Fire Marshal's Office determined they had exceeded their occupancy limit.

Another limitation was trying to attend an all employee staff meeting. Very few nightclubs require all staff to attend the same meetings because of issues including the following: size of staff, change in shift work, time of day (3:30 a.m. for two of the nightclubs surveyed) and management requiring staff-only meetings, such as bartenders, managers or cooks. This required the researcher to make two to four trips to some of the nightclubs.

However, the biggest limitation occurred with the lack of participation from the two nightclubs with 175 employees each. Because management failed, on numerous occasions, to put the surveys with employee checks to be filled out and returned neither nightclub was part of the results.

Definition of Terms

Authority Having Jurisdiction. The organization, office, or individual responsible for approving equipment, materials, an installation, or a procedure.

Occupant Load. The number of people that are permitted to occupy a building or portion of a building at any one time.

Proprietary Security Organization. Any person or department thereof which employs a security guard/officer solely for such person in an employer/employee relationship.

Patron. A regular client or customer.

Staff. The personnel of an organization who works for a wage.

Tentative Interim Amendment. Considered part of the code once approved by the Standards Council and effective only between editions of the standard.

Results

Question 1. What type of training is currently required for nightclub staff in Nashville?

To identify the type of training required for nightclub staff in Nashville,
interviews were conducted with several licensing boards and security companies.

According to the Executive Director of the Tennessee Alcoholic Beverage Commission, Shari Danielle Elks, there are no requirements for training nightclub staff in fire related issues. However, she feels there is a need to train nightclub staff in how to conduct a proper emergency evacuation of a crowd under the influence of alcohol. (personal communication, November 14, 2004).

In "Tennessee Private Protective Services Law and Rules" section 62-35-123 states, "It is unlawful for any person to act as a proprietary security organization without

first having notified the commissioner in writing" (p. 14). A lot of nightclubs do not realize they need to be registered as a proprietary security organization. According to the Administrative Manager of the Department of Commerce and Insurance, Cody Vest, there is no fee for the registration. Proprietary security organizations are required to follow a few guidelines including the following: complete a notice of submission form, show proof of having a minimum \$400,000 insurance policy and meet other proper insurance requirements.

According to section 62-35-118(a) in "Tennessee Private Protective Services Law and Rules," "a private security guard applicant must complete a one hour emergency procedure class "administered by a certified trainer, and pass an examination..." (p. 11). However, section 62-35-103 (b)(14) does not require proprietary security guards to receive any training, it suggests "proprietary security guards/officers whose primary duties involve contact with the public should have training..." (p. 5). Suggested topics during the four hour class include first aid and emergency procedures, evacuation and notification. There are only three employees to enforce all of the state procedures: one for west, middle and east Tennessee. (personal communication, November 15, 2004).

President and Chief Executive Officer for the Tennessee Restaurant Association, Ronnie Hart, states, "Any type of training that will help people who serve the public and could save life's is something that every individual should consider." (personal communication, December 7, 2004).

According to Vice President of Client Relations, Rock Solid Security employs around 200 people on an annual bases and currently conduct their own training.

However, depending on the number and type of events occurring in Nashville, they have

employed up to 1,000 security guards throughout the year. Although they mainly cover only large event venues, they currently provide security for five nightclubs in Nashville. (L. Turnbow, personal communication, November 16, 2004).

Jack Vaughn, Operations Manager for Contemporary Services Corporation, states they employee up to 600 people for events that take place in both The Coliseum (National Football League Tennessee Titans) and Gaylord Entertainment Center (National Hockey League Nashville Predators and Arena Football League Nashville Kats). Before every event a map is given to every employee showing the closest exit to their location. Panic control is also covered before each event begins.

Question 2. What type of training should be conducted for nightclub staff in Nashville?

In order to identify the type of training that should be considered for nightclub staff in Nashville, an external survey (Appendix A) was developed. The external survey was used to identify the need for fire prevention, protection and suppression training. The complete results for the external survey appear in (Appendix B-H).

1. Are you?

A total of 675 nightclub staff were given the external survey for completion. Total respondents to this survey were 499 nightclub staff (74%). A breakdown of all the responses to Question 1, are shown in Table I:

Table I

Respondents	Number Distributed	Number Respondents	Percentage (%)
Male	291	224	(77)
Female	384	275	(72)
Total	675	499	(74)

2. Are you employed?

Of the 499 nightclub staff who responded, 326 respondents (65%) worked full-time and 197 respondents (60%) of those were male. However, 135 female respondents (78%) worked part-time. A breakdown of all responses to Question 2 is shown in Table II:

Table II

Respondents	n =	Male (%)	Female (%)
Full-time	326	(60)	(40)
Part-time	173	(22)	(78)

3. How many years have you been employed at the nightclub?

As can be seen in Table III, by far the largest group has been employed less than six years. There were 414 respondents (88%) in the 1-5 year category. A breakdown of all responses to Question 3 is shown in Table III:

Table III

Years of Service	n=	Male (%)	Female (%)
1-5	414	(44)	(56)
6-11	36	(56)	(44)
12-15	18	(50)	(50)
Over 16	5	(20)	(80)

Note. 26 respondents did not have at least one year of service and were taken out of the total responses.

Responses were further analyzed by full-time and part-time status, which shows almost an equal percentage in the 1-5 year category. However, the percentage increases for each category up to 100 percent for those respondents in the over 16 year of service category. A breakdown of all responses to Question three is shown in Table IV:

Table IV

Years of Service	n=	Full-time (%)	Part-time (%)
1-5	414	(55)	(45)
6-11	36	(75)	(25)
12-15	18	(78)	(22)
Over 16	5	(100)	

4. What is your age group?

Table V reveals over half of all respondents are represented in the 18-25 age group with 243 respondents (51%). However, 178 of those respondents (84%) represent the female category. The number in the male category increases with each age group, with 18 respondents (82%) representing the over 40 age group. A breakdown of all responses to Question 4 is shown in Table V:

Table V

Age Group	n=	Male (%)	Female (%)
18-25	243	(26)	(84)
26-30	117	(53)	(47)
31-35	67	(64)	(36)
36-40	24	(67)	(33)
Over 40	22	(82)	(18)

When responses were further analyzed by full-time and part-time status, the 243 respondents in the 18-25 age group showed almost an equal percentage along with the 22 respondents in the over 40 age group. A breakdown of all responses to Question 4 is shown in Table VI:

Table VI

Age Group	n=	Full-time (%)	Part-time (%)
18-25	243	(49)	(51)
26-30	117	(66)	(34)
31-35	67	(76)	(24)
36-40	24	(92)	(8)
Over 40	22	(45)	(55)

5. What is your current position?

Of the 162 respondents in the server category, 145 (90%) were female and all 29 respondents (100%) in the doorman category were male. A breakdown of all responses to Question 5 is shown in Table VII:

Table VII

Respondents	n=	Male (%)	Female (%)
Bartender	113	(31)	(69)
Cook	43	(86)	(14)
Doorman	29	(100)	
Manager	63	(78)	(22)
Server	162	(10)	(90)
Other	63	(70)	(30)

Note: Other category includes barback, cashier, coat check, disc jockey, host and owner.

Responses were further analyzed by full-time and part-time statuses in Table VIII which shows all 63 respondents (100%) in the manager category were full-time. The cook category showed 34 respondents (79%) were also full-time. A breakdown of all responses to Question 5 is shown in Table VIII:

Table VIII

Respondents	n=	Full-time (%)	Part-time (%)
Bartender	113	(58)	(42)
Cook	43	(79)	(21)
Doorman	29	(38)	(62)
Manager	63	(100)	
Server	162	(57)	(43)
Other	63	(67)	(33)

6. Does the nightclub have an emergency action plan?

In the sever category, 118 respondents (73%) indicated their nightclub had no emergency action plan or they were not sure if the nightclub had one. Even 34

respondents (54%) in the manager category were unclear about having an emergency action plan. A breakdown of all responses to Question 6 is shown in Table IX:

Table IX

Respondents	n =	Yes (%)	No (%)	Not Sure (%)
Bartenders	113	(34)	(17)	(49)
Cooks	43	(44)	(14)	(42)
Doorman	29	(45)	(24)	(31)
Manager	63	(46)	(27)	(27)
Server	162	(27)	(8)	(65)
Other	63	(38)	(19)	(43)

Responses were further analyzed by age group. There were 168 respondents (69%) in the 18-25 category who were unaware of any type of emergency action plan for their nightclub. No age group had more than 45 percent of the respondents who indicated they were aware of having an emergency action plan for their nightclub. A breakdown of all responses to Question 6 is shown in Table X:

Table X

Age Group	n =	Yes (%)	No (%)	Not Sure (%)
18-25	243	(31)	(10)	(59)
26-30	117	(41)	(15)	(44)
31-35	67	(39)	(19)	(42)
36-40	24	(25)	(29)	(46)
Over 40	22	(45)	(32)	(23)

7. Do you know the location of your buildings fire alarm panel?

Table XI reveals that 99 respondents (61%) in the server category either did not know or were not sure where their fire alarm panel is located in their nightclub. However, only 48 respondents (76%) in the manager category knew the location of their fire alarm panel. A breakdown of all responses to Question 7 is shown in Table XI:

Table XI

Respondents	n =	Yes (%)	No (%)	Not Sure (%)
Bartenders	113	(54)	(18)	(28)
Cooks	43	(63)	(23)	(14)
Doorman	29	(62)	(24)	(14)
Manager	63	(76)	(11)	(13)
Server	162	(39)	(35)	(26)
Other	63	(58)	(21)	(21)

Responses were further analyzed by age group. Table XII shows that 136 respondents (55%) in the 18-25 age group did not know the location of their buildings fire alarm panel. The over 40 age group category had only 15 respondents (71%) who knew where the fire alarm panel was located for their building. A breakdown of all responses to Question 7 is shown in Table XII:

Table XII

Age Group	n =	Yes (%)	No (%)	Not Sure (%)
18-25	243	(45)	(26)	(29)
26-30	117	(60)	(23)	(17)
31-35	67	(69)	(20)	(11)
36-40	24	(52)	(22)	(26)
Over 40	22	(71)	(15)	(14)

8. Do you know how to use the buildings fire alarm system?

Only 47 respondents (75%) in the manager category knew how to use the buildings fire alarm system. A breakdown of all responses to Question eight is shown in Table XIII:

Table XIII

Respondents	n =	Yes (%)	No (%)	Not Sure (%)
Bartenders	113	(50)	(34)	(16)
Cooks	43	(61)	(24)	(15)
Doorman	29	(46)	(46)	(8)
Manager	63	(75)	(12)	(13)
Server	162	(31)	(43)	(26)
Other	63	(48)	(34)	(18)

Analyzing the responses by age group showed that 144 respondents (60%) in the 18-25 category did not know how the building fire alarm system worked and neither did 55 respondents (47%) in the 26-30 age group. A breakdown of all responses to Question 8 is shown in Table XIV:

Table XIV

Age Group	n =	Yes (%)	No (%)	Not Sure (%)
18-25	243	(40)	(39)	(21)
26-30	117	(53)	(29)	(18)
31-35	67	(57)	(31)	(12)
36-40	24	(48)	(30)	(22)
Over 40	22	(62)	(24)	(14)

9. Does your building have a sprinkler system?

Table XV indicates that over all, 109 respondents (23%) were unsure if their building even had a sprinkler system with the largest percentage occurring in the server category, where 65 respondents (40%) were unsure. A breakdown of all responses to Question 9 is shown in Table XV:

Table XV

Respondents	n =	Yes (%)	No (%)	Not Sure (%)
Bartenders	113	(46)	(31)	(23)
Cooks	43	(71)	(17)	(12)
Doorman	29	(68)	(25)	(7)
Manager	63	(60)	(29)	(11)
Server	162	(44)	(16)	(40)
Other	63	(57)	(39)	(4)

As can be seen in Table XVI, the 18-25 and 26-30 age groups had 100 respondents (29%) who were unsure if their building had a sprinkler system. A breakdown of all responses to Question 9 is shown in Table XVI:

Table XVI

Age Group	n =	Yes (%)	No (%)	Not Sure (%)
18-25	243	(48)	(25)	(27)
26-30	117	(53)	(19)	(28)
31-35	67	(70)	(23)	(7)
36-40	24	(52)	(39)	(8)
Over 40	22	(47)	(47)	(6)

10. Have you ever heard the sound/signaling method of the fire evacuation alarm?

Table XVII reveals that out of all the categories, surprisingly 301 respondents (64%) had never heard the sound/signaling method for their fire evacuation alarm or were unsure if they had heard the alarm. A breakdown of all responses to Question 10 is shown in Table XVII:

Table XVII

Respondents	n =	Yes (%)	No (%)	Not Sure (%)
Bartenders	113	(43)	(52)	(5)
Cooks	43	(34)	(49)	(17)
Doorman	29	(43)	(50)	(7)
Manager	63	(52)	(44)	(4)
Server	162	(25)	(57)	(18)
Other	63	(48)	(48)	(4)

Analyzing the responses by age group revealed the lowest percentage in the 18-25 category where 164 respondents (68%) did not know if they had ever heard the sound/signaling method for a fire evacuation. Also less than half in all the other age groups indicated they had never heard the sound/signaling method for a fire evacuation either. A breakdown of all responses to Question 10 is shown in Table XVIII:

Table XVIII

Age Group	n =	Yes (%)	No (%)	Not Sure (%)
18-25	243	(32)	(55)	(13)
26-30	117	(39)	(48)	(13)
31-35	67	(41)	(49)	(10)
36-40	24	(43)	(43)	(14)
Over 40	22	(33)	(52)	(15)

11. Are you familiar with at least two alternative exits?

Overall 441 respondents (93%) indicated that they are familiar with at least two alternative exits. A breakdown of all responses to Question 11 is shown in Table XIX:

Table XIX

Respondents	n =	Yes (%)	No (%)	Not Sure (%)
Bartenders	113	(92)	(6)	(2)
Cooks	43	(98)	(2)	
Doorman	29	(98)		(2)
Manager	63	(98)	(2)	
Server	162	(93)	(4)	(3)
Other	63	(90)	(3)	(7)

Even when responses were analyzed by age groups, the 18-25 category had 23 respondents (9%) who were not aware of an alternative exit. A breakdown of all responses to Question 11 is shown in Table XX:

Table XX

Age Group	n =	Yes (%)	No (%)	Not Sure (%)
18-25	243	(91)	(6)	(3)
26-30	117	(95)	(3)	(2)
31-35	67	(97)		(3)
36-40	24	(100)		
Over 40	22	(100)		

12. Have you ever been involved in an emergency evacuation drill on the job?

Table XXI indicated that 148 respondents (92%) in the server category had never been involved in an emergency evacuation drill and only 15 respondents (24%) in the manager's category had ever participated. A breakdown of all responses to Question 12 is shown in Table XXI:

Table XXI

Respondents	n =	Yes (%)	No (%)	Not Sure (%)
Bartenders	113	(19)	(79)	(2)
Cooks	43	(29)	(71)	
Doorman	29	(18)	(82)	
Manager	63	(24)	(74)	(2)
Server	162	(7)	(92)	(1)
Other	63	(16)	(80)	(4)

Analyzing the responses by age group, revealed that overall, 388 respondents (82%) had never participated in an emergency evacuation drill and that out of all the age groups, 30 percent participation was the highest percentage. A breakdown of all responses to Question 12 is shown in Table XXII:

Table XXII

Age Group	n =	Yes (%)	No (%)	Not Sure (%)
18-25	243	(12)	(87)	(1)
26-30	117	(15)	(82)	(3)
31-35	67	(25)	(75)	
36-40	24	(30)	(65)	(15)
Over 40	22	(24)	(76)	

13. Have you ever been trained on how to conduct an emergency evacuation?

As can be seen in Table XXIII, 215 respondents (78%) in the bartender and server categories had never been trained how to conduct an emergency evacuation. Only 24

respondents (38%) in the manager category had been trained in emergency evacuation. A breakdown of all responses to Question 13 is shown in Table XXIII:

Table XXIII

Respondents	n =	Yes (%)	No (%)	Not Sure (%)
Bartenders	113	(32)	(65)	(13)
Cooks	43	(39)	(59)	(2)
Doorman	29	(43)	(54)	(3)
Manager	63	(38)	(61)	(1)
Server	162	(17)	(78)	(5)
Other	63	(30)	(67)	(3)

Responses were further analyzed by age group about being trained on how to conduct an emergency evacuation. Only 136 respondents (29%) out of all age groups had ever received training on emergency evacuation. A breakdown of all responses to Question 13 is shown in Table XXIV:

Table XXIV

Age Group	n =	Yes (%)	No (%)	Not Sure (%)
18-25	243	(22)	(74)	(4)
26-30	117	(32)	(65)	(3)
31-35	67	(39)	(59)	(2)
36-40	24	(39)	(52)	(9)
Over 40	22	(43)	(52)	(5)

14. Does the staff gather at a certain location following an emergency evacuation?

Table XXV reveals that only 18 respondents (29%) say they had a meeting place following an emergency evacuation. However, in the sever category, 138 respondents (86%) either had no meeting place or they were not sure. A breakdown of all responses to Question 14 is shown in Table XXV:

Table XXV

Respondents	n =	Yes (%)	No (%)	Not Sure (%)
Bartenders	113	(23)	(38)	(39)
Cooks	43	(39)	(17)	(44)
Doorman	29	(25)	(43)	(32)
Manager	63	(29)	(50)	(21)
Server	162	(14)	(33)	(53)
Other	63	(25)	(25)	(50)

When analyzed by age group, 366 respondents (77%) overall did not know where to gather following an emergency evacuation. A breakdown of all responses to Question 14 is shown in Table XXVI:

Table XXVI

Age Group	n =	Yes (%)	No (%)	Not Sure (%)
18-25	243	(20)	(31)	(49)
26-30	117	(24)	(34)	(42)
31-35	67	(18)	(49)	(33)
36-40	24	(30)	(35)	(35)
Over 40	22	(43)	(33)	(24)

15. Have you ever used a fire extinguisher to put out a fire?

There were 115 respondents (72%) in the server category who indicated they had never used a fire extinguisher to put out a fire, although 23 respondents (79%) in the doorman category had. A breakdown of all responses to Question 15 is shown in Table XXVII:

Table XXVII

Respondents	n =	Yes (%)	No (%)	Not Sure (%)
Bartenders	113	(43)	(57)	
Cooks	43	(68)	(32)	
Doorman	29	(79)	(21)	
Manager	63	(58)	(42)	
Server	162	(27)	(72)	(1)
Other	63	(57)	(43)	

Responses were further analyzed by age group and overall 219 respondents (46%) had used a fire extinguisher to put out a fire. However, 216 respondents (60%) in the two youngest categories had never used a fire extinguisher. A breakdown of all responses to Question 15 is shown in Table XXVIII:

Table XXVIII

Age Group	n =	Yes (%)	No (%)	Not Sure (%)
18-25	243	(35)	(64)	(1)
26-30	117	(49)	(51)	
31-35	67	(59)	(41)	
36-40	24	(78)	(22)	
Over 40	22	(76)	(24)	

16. Have you ever been trained on how to properly use a fire extinguisher?

Overall 263 respondents (56%) had been trained on how to properly use a fire extinguisher. However, 100 respondents (62%) in the server category had never been trained. A breakdown of all responses to Question 16 is shown in Table XXIX:

Table XXIX

Respondents	n =	Yes (%)	No (%)	Not Sure (%)
Bartenders	113	(60)	(39)	(1)
Cooks	43	(61)	(39)	
Doorman	29	(79)	(21)	
Manager	63	(71)	(29)	
Server	162	(37)	(62)	(1)
Other	63	(66)	(33)	(1)

Responses were further analyzed by age group, where the youngest group 18-25, had 135 respondents (54%) that had never received any training on how to properly use a fire extinguisher use. However, it appears that the percentage of respondents being trained increases for each age group. A breakdown of all responses to Question 16 is shown in Table XXX:

Table XXX

Age Group	n =	Yes (%)	No (%)	Not Sure (%)
18-25	243	(45)	(54)	(1)
26-30	117	(63)	(37)	
31-35	67	(69)	(31)	
36-40	24	(70)	(30)	
Over 40	22	(71)	(29)	

17. Have you ever been trained in first aid?

Table XXXI indicates that 24 respondents (83%) in the doorman category had received first aid training along with 81 respondents (72%) in the bartender category. A breakdown of all responses to Question 17 is shown in Table XXXI:

Table XXXI

Respondents	n =	Yes (%)	No (%)	Not Sure (%)
Bartenders	113	(72)	(28)	
Cooks	43	(54)	(44)	(2)
Doorman	29	(83)	(17)	
Manager	63	(60)	(40)	
Server	162	(60)	(38)	(2)
Other	63	(67)	(31)	(2)

Responses were further analyzed and overall 306 respondents (65%) had already received first aid training, with no significant age group receiving more training than another. A breakdown of all responses to Question 17 is shown in Table XXXII:

Table XXXII

Age Group	n =	Yes (%)	No (%)	Not Sure (%)
18-25	243	(63)	(35)	(2)
26-30	117	(65)	(34)	(1)
31-35	67	(67)	(33)	
36-40	24	(67)	(33)	
Over 40	22	(67)	(33)	

18. Do you think first aid training should be a part of the training program?

Table XXXIII shows 304 respondents (64%) overall thought first aid training should be a part of the certification program. While almost half, 72 respondents (45%) in the server category thought first aid may not be necessary. A breakdown of all responses to Question 18 is shown in Table XXXIII:

Table XXXIII

Respondents	n =	Yes (%)	No (%)	Not Sure (%)
Bartenders	113	(64)	(23)	(13)
Cooks	43	(61)	(22)	(17)
Doorman	29	(79)	(14)	(7)
Manager	63	(69)	(19)	(12)
Server	162	(55)	(29)	(16)
Other	63	(79)	(7)	(14)

The two youngest age groups had 221 respondents (62%) that indicated the need for first aid training. A breakdown of all responses to Question 18 is shown in Table XXXIV:

Table XXXIV

Age Group	n =	Yes (%)	No (%)	Not Sure (%)
18-25	243	(60)	(24)	(16)
26-30	117	(64)	(23)	(13)
31-35	67	(70)	(18)	(12)
36-40	24	(78)	(5)	(17)
Over 40	22	(76)	(14)	(10)

19. Do you think that nightclub staff should receive fire prevention, protection and suppression training before being employed?

As can be seen by Table XXXV, overall 218 respondents (46%) indicated the need for staff to receive training before becoming employed. A breakdown of all responses to Question 19 is shown in Table XXXV:

Table XXXV

Respondents	n =	Yes (%)	No (%)	Not Sure (%)
Bartenders	113	(44)	(34)	(22)
Cooks	43	(44)	(22)	(34)
Doorman	29	(39)	(39)	(22)
Manager	63	(58)	(29)	(13)
Server	162	(41)	(37)	(22)
Other	63	(52)	(25)	(23)

Responses were further analyzed by age group and overall, 151 respondents (32%) did not want the training before employment. A breakdown of all responses to Question 19 is shown in Table XXXVI:

Table XXXVI

Age Group	n =	Yes (%)	No (%)	Not Sure (%)
18-25	243	(44)	(34)	(22)
26-30	117	(45)	(31)	(24)
31-35	67	(51)	(30)	(19)
36-40	24	(52)	(30)	(18)
Over 40	22	(43)	(33)	(24)

20. Would you be willing to go through a fire training certification program?

Table XXXVII indicates that only 53 respondents (11%) would not be willing to go through a fire training certification program. However, 55 respondents (86%) in the manager category were willing to go through the fire training certification program. A breakdown of all responses to Question 20 is shown in Table XXXVII:

Table XXXVII

Respondents	n =	Yes (%)	No (%)	Not Sure (%)
Bartenders	113	(68)	(12)	(20)
Cooks	43	(61)	(10)	(29)
Doorman	29	(71)	(7)	(22)
Manager	63	(86)	(3)	(11)
Server	162	(53)	(17)	(30)
Other	63	(75)	(5)	(20)

Responses were further analyzed by age group, and overall there were 312 respondents (66%) that indicated they would attend a fire certification program. A breakdown of all responses to Question 20 is shown in Table XXXVIII:

Table XXXVIII

Age Group	n =	Yes (%)	No (%)	Not Sure (%)
18-25	243	(62)	(13)	(25)
26-30	117	(62)	(15)	(22)
31-35	67	(77)	(5)	(18)
36-40	24	(87)		(13)
Over 40	22	(81)	(4)	(14)

Question 3. What type of training do other cities require for nightclub staff?

The literature review, along with sending members of the Prevention Advocacy Resources and Data Exchange e-mail network, provided information on what cities were currently recommending for nightclub staff training. Although not specific, the need to train nightclub staff was recommended by several state and city task forces that were put together to study nightclub safety including the following: Massachusetts, Rhode Island, Virginia and the cities of Minneapolis and Philadelphia.

To provide a safer environment in Minneapolis nightclubs, an *Assembly Safety Plan* that details fire evacuation and fire safety procedures for all employees was developed. In "Safety Plan and Emergency Procedures for Assembly Occupancies" it states, "The owner or authorized representative shall assign a responsible person as Fire Safety Director to work with the Minneapolis Fire Department in the establishment, implementation, and maintenance of the Assembly Safety Plan" (p. 6).

After reviewing the fire code in Philadelphia and finding a regulation on the books since 1950 that required all places of public assembly to have a one-hour class on

fire safety evacuation training, an approved evacuation plan which designates specific employees as fire wardens and other specific duties for the other employees is required along with fire extinguisher use and being able to point out the exits in the building every hour on the hour. This code has recently become mandatory for every nightclub and bar venue that provides entertainment throughout the city. (M. Carroll, personal communication, December 13, 2004). Maybe the 1942 Coconut Grove fire, the deadliest nightclub fire where 492 people died, prompted Philadelphia back in 1950 to change the fire code.

Robert Smith, President of Nightclub Security Consultants, is unaware of any cities that currently require nightclub staff to be trained in fire safety. However, his company does advise clients to contact their local fire departments for training. (personal communication, December 15, 2004).

Internationally, Hong Kong and the U. K. have already created licensure programs for staff working in nightclubs. However, U. K. licensure deals with door supervisors while Hong Kong requires all staff to be trained in fire safety management.

Discussion

Although fire and building codes are continuously updated after each tragic incident, maybe we should be focusing our attention on the people that are closest to the fire problem, nightclub staff. Simply developing fire codes and not covering the importance behind each code with the people it affects the most, those closest to the problem, seems to be unjust. In "Disasters at Clubs Repeat Tragic History" Bayles and Hampton write, "Some who have studied club disasters are resigned to the conclusion that no matter how fire codes are written or how buildings are constructed, a similar

disaster will happen again" (USAtoday Online, 2004). On December 31, 2004, another nightclub tragedy did occur, after someone in the crowd tossed a flare toward the ceiling in Argentina, where more than 700 people were injured and 175 people were trapped and killed by the fire.

Research showed the need for developing a fire training certification program for nightclub staff in fire prevention, protection and suppression activities. In "Fire in the Workplace" Ron Coleman states, "Everybody thinks fire safety is the responsibility of the fire department. However, about 90% of the time when we respond it is too late" (Idea Bank, 1994, motion picture). Even though nightclubs can count on a quick response from the local fire department, nightclub staff should know exactly what to do before firefighters arrive. Therefore, to improve the chances of survival in the event of a fire occurring in nightclubs, we need to consider who is truly first on the scene, the staff. If the fire service is ever going to keep the community safe in an environment, such as a nightclub, we need to train nightclub staff on how to handle small emergencies and make them aware of how to identify problems before they occur. This reason alone is why nightclub staff should receive the proper training in fire prevention, protection and suppression activities before the event of fire or another emergency occurs.

To date, Nashville does not require nightclub staff to be properly trained before becoming employed. After conducting interviews with various state departments including the Tennessee Alcoholic Beverage Commission, Department of Commerce and Insurance and the Tennessee Restaurant Association, it appears that nobody has considered requiring nightclub staff training. Although, the Department of Commerce and Insurance in "Tennessee Private Protective Services Law and Rules" encourages

"proprietary security guards/officers whose primary duties involve contact with the public should have training..." (p. 5). The "Tennessee Private Protective Services Law and Rules" also states, "It is unlawful for any person to act as a proprietary security organization without having notified the commissioner in writing" (p. 14). Out of the 30 nightclubs surveyed, records indicated that only seven nightclubs were registered as proprietary security organizations. Even the largest two security companies in Nashville, Rock Solid and Contemporary Services, require very little fire safety training of their employees.

Overall, only 11% of the respondents to the external survey indicated that they would not be willing to go through a fire training certification program and 66% indicated that they would attend. However, 86% of the managers supported the need for training. Maybe managers understand the need for being properly trained on the regulations, safety issues, fire precautions and legal requirements before an incident occurs.

Even though emergency action plans are required by law, only 35% of all nightclub staff surveyed indicated that they were aware of having a plan. In "Introduction to Employee Fire and Life Safety," according to Ball (2001), OSHA requires any business with more than 10 employees to write and review the "designated actions that employers and employees must take to ensure safety from fire and other emergencies" (p. 66). There were only two nightclubs surveyed that had fewer than 10 employees. When the room is filled with smoke and the room seems endless, it is important that nightclub staff understand the type of appropriate action to take.

In the 2000 edition of NFPA 101, *Life Safety Code*, it sates, "Assembly occupancies with occupant load of more than 300...shall be provided with an approved fire alarm system in accordance with 9.6.1 and 13.3.4" (p. 101-115). However, just 50% of all nightclub staff knew where the fire alarm panel was located and how to use it, but only 36% of respondents had ever heard the sound/signaling method for fire evacuation. Even though only six nightclubs were required to have an approved fire alarm system, 21 nightclubs actually had one.

Surprisingly during the survey, 52% of the respondents indicated that their building had a sprinkler system. However, when the responses were analyzed by age groups, 29% of the two youngest groups were unsure. The researcher also noticed the majority of respondents being unsure about their building having a sprinkler system.

Only 10 of the nightclubs surveyed had a sprinkler system.

Although, 81% of the respondents indicated that they have never been involved in an emergency evacuation, most respondents, 93% stated they knew at least two alternative exits. But only 29% of the respondents have been properly trained on how to conduct an emergency evacuation. Marsland (1999) states, "Poorly trained indecisive staff are not likely to be effective in an evacuation" (p. 14). In "Nightclub Fires in 2000" the writer supports the need for training staff in emergency evacuation by stating:

Human nature compounds the problem of evacuation during a fire, as most will attempt to leave out of the same door they entered, rather than looking for an escape route. Therefore, even if a building has a sufficient number of exits for an evacuation, the majority of the crowd may rush for the main entranceway. (p. 2)

Almost half, 46% of all the respondents have used a fire extinguisher and 55% of all respondents have been trained on how to use a fire extinguisher. If employers provide fire extinguishers for employee use, they must provide training. OSHA states:

Where extinguishers are provided but are not intended for employee use and the employer has an emergency action plan and a fire prevention plan that meet the requirements of 29 CFR 1910.38 and 29 CFR 1910.39 respectively, then only the requirements of paragraphs (e) and (f) of this section apply. (OSHA Online, 2004)

Even though respondents indicated that they had used fire extinguishers in the past, it is not known if they were properly used.

Most, 66% of all nightclub staff have received first aid training and agreed that it should a part of the training program. It is not evident how much first aid training any of the respondents received or how often they were required to use their skills.

With 414 respondents, 88%, having less than six years of service, there were only 22% of the respondents who did not want to receive fire prevention, protection and suppression training before being employed. In his research, Walker (1999) supports the need to have a registration scheme for door supervisors stating, "90% see a definite need for a national registration scheme for their industry, realizing the benefits that this would provide for themselves, their employers and the public" (p. 59).

Ever since 1911, NFPA has been committed to updating fire and building codes to help provide a safer environment in assembly occupancies using NFPA 1, *Fire Prevention Code* and NFPA 101, *Life Safety Code* as the nationally recognized general requirements. Other recognized requirements include NFPA 1620 *Pre-Incident Planning*

and the newly developed NFPA 5000, *Building Construction and Safety Code* to help code officials. Even though Nashville operates under the 2000 edition of NFPA 101, *Life Safety Code*, these fire and building codes, developed by consensus, basically describe the way it has to be and tells the fire service what to do in order to help keep everybody safe.

The need to develop national requirements for nightclub staff has already been addressed through legislation in the U. K. and Hong Kong. In order to raise the level of professional skills in the security industry in the U. K., all door supervisors are required to go through training before April 2005. To be properly licensed, their training must include proper emergency evacuation procedures. The Security Industry Authority has been given the responsibility for the personal licensing of all door supervisors.

Hong Kong has also looked into a licensing system for those people responsible for fire safety in karaoke establishments. Chow and Lui (2000) write, "Induction training should be provided to all new staff, including those temporary and part-time. This is essential because untrained employees may endanger themselves and also the customer" (p. 109).

This study also identified several task forces that were put together to study nightclub problems nationally, at the state level and locally, that include the following: Rhode Island, Massachusetts, Virginia, Philadelphia and Minneapolis. Philadelphia currently has to approve a color coded emergency evacuation plan for all nightclubs and bar venues, along with mandatory fire safety training for all employees. Minneapolis has put together guidelines to provide a safer environment for patrons in assembly occupancies entitled, "Safety Plan and Emergency Procedures for Assembly

Occupancies" which covers fire evacuation and fire safety procedures. National Security Consultants, based in San Diego, formed a company in 1998 for nightclub security and provides some fire safety training.

Nationally, there has been a lack of emphasis placed on the value of training and educating nightclub staff in fire prevention, protection and suppression activities. In "Safety in Numbers," Ron Cote (2002), NFPAs principal life safety engineer states, "Historically, the Life Safety Code has managed crowds passively, first by anticipating the expected crowd behavior, then by equipping the facility with hardware and systems that mitigate adverse occupant impact" (p. 41). It appears that most of the training in the U. S. and abroad, except in Philadelphia and Minneapolis, is currently centered on doorman. However, every nightclub staff member should be properly trained in how to deal with the different emergencies they may face.

Recommendations

The problem was a lack of fire prevention, protection and suppression training for nightclub staff. The purpose of this applied research project was to create a fire training certification program for nightclub staff.

Based on this study, Nashville should begin to set minimum fire training certification requirements for nightclub staff. The fire service training certification program should include fire prevention, protection and suppression activities, along with first aid training.

External survey in this study has shown that most nightclub staff accept a position without knowing all the responsibilities of keeping patrons safe during an emergency situation. While some nightclub staff may view fire certification training as a barrier to

their job, others will see this as an opportunity to keep patrons safe and be better prepared and made more aware of the different types of issues around them involving fire.

Therefore, based on the literature review, external survey and the analysis of this applied research project, the following recommendations should be considered for the development of a fire training certification program for nightclub staff in Nashville. This plan for nightclub staff includes training in fire prevention, protection and suppression activities, also first aid, which will help prepare future nightclub staff for creating a safe environment for all patrons.

Recognizing that training nightclub staff would benefit themselves, the public and assist the NFD, the following should be considered:

- The nightclub staff fire training certification program should cover the following subjects:
 - Fire Classifications
 - Fire Systems
 - Elements of Fire
 - Fire Extinguishers
 - Evacuation Procedures
 - Practical Demonstrations on Extinguishing Fires
 - Current Legislation
 - First Aid including Cardiopulmonary Rescessitation
- 2. Along with classroom training, nightclub staff should go through training where they work so they can become more familiar with their particular building. This can be done by walking through different fire

scenarios and practice drills, allowing each person to identify their role in the event of an emergency by using the acronym (RACE).

- R Rescue patrons
- A Sound the alarm system
- C Confine the fire with extinguisher or by shutting the door
- E Evacuate everybody as soon as possible
- 3. This certification training program can be used as a way to standardize the minimum requirements needed to work in nightclubs. Whether all nightclub staff working will ever be trained in fire prevention, protection and suppression activities, lowering insurance premiums to nightclub owners who have their staff properly trained is something that should be considered.
- 4. Follow the guidelines set up by the Minneapolis Fire Department in helping owners/managers to promote and create a fire safe environment in nightclubs throughout Nashville. This can be done by creating a fire safety plan and holding regular monthly meetings to update and clarify the owner/manager responsibilities. A closer relationship between Nashville nightclub owner/manager and the NFD could help determine potential problems before they arise.
- 5. Take steps to introduce the fire code currently used in Philadelphia for the mandatory fire safety training of all nightclub staff. In order to provide this mandatory training, the NFD should apply for funding that will help provide the necessary resources to complete the training

for all the nightclubs in Nashville. Fire Corps, which began in December 2004, provides grant money for helping support the mission of the fire and emergency services department in non-operational roles by the use of citizen advocates.

Since the NFD will have to rely on nightclub staff to offer emergency assistance including evacuation, if necessary, prior to the departments arrival, we should develop a plan by spring of 2005 to be implemented in the fall of 2006. This plan should be a win-win approach for the NFD, nightclub owners, community and all patrons. Implementation of this plan will help the NFD and nightclubs to minimize the risks associated with fire.

In the event of a fire, nightclub staffs are the first to respond and should be educated on the importance of fire safety through proper fire prevention, protection and fire suppression activities and about how a fire training certification program can save lives. Realizing, still the best way to fight a fire remains being able to prevent one before it begins.

It is not enough to discuss fire safety theoretically: causes of past nightclub fires, strategies to reduce the possibility of a fire or what to do in case fire occurs. McManus and O'Toole (2004) in "The Nightclub, Bar and Restaurant Security Handbook" write, "Whether a club holds 50 or 5,000 people, if a situation arises where those people must be quickly evacuated, your staff had better be prepared" (p. 243). Nightclub staff can get more out of training when they are asked to perform different duties where they work, rather than setting in a classroom. This type of learning environment will allow them to become more alert and detect any potential hazards in their specific club, which should help in reducing the number of incidents that the fire department responds too.

This new standard for nightclub staff is aimed at raising the current standards to safeguard the health and safety of patrons who visit nightclubs anywhere at anytime. Without the proper training of nightclub staff, we continue to take a chance on letting history repeat itself again somewhere. Unfortunately, tragic fires in nightclubs may still occur in spite of all the efforts to certify nightclub staff in fire prevention, protection and suppression activities.

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Appendix A Nightclub Staff Survey

Please answer the following questions based on your experience. Your answers will help train future nightclub staff in fire prevention, protection and suppression activities.

1. Are you?	Male	Female		
2. Are you employe	d?			
Full-time	_ Part-time	-		
3. How many years	s have you been	employed at th	ne nightclub?	
1 to 5	6 to 11	12 to 15	over 16	
4. What is your age	e group?			
18-25	26-30	31-35	36-40	over 40
5. What is your cur	rent position?			
Bartender _	Doorr	nan	Server	
Cook	Mana	ger	Other	
6. Does the nightcl	ub have an eme	rgency action p	olan?	
Yes	No	Not Sure		
7. Do you know the	e location of you	ur buildings fir	e alarm panel?	
Yes	No	Not Sure		
8. Do you know ho	w to use the bu	ildings fire alar	m system?	
Yes	No	Not Sure		
9. Does your buildi	ing have a sprin	kler system?		
Yes	No	Not Sure		
10. Have you ever h	eard the sound/s	signaling metho	od of the fire ev	acuation alarm?
Yes	No	Not Sure		

11.	Are you familia	with at least tw	wo alternative exits?
	Yes	No	Not Sure
12. 1	Have you ever b	een involved ir	an emergency evacuation drill on the job?
	Yes	No	Not Sure
13. 1	Have you ever b	een trained on	how to conduct an emergency evacuation?
	Yes	No	Not Sure
14. 1	Does the staff ga	ather at a certai	n location following an emergency evacuation?
	Yes	No	Not Sure
15. l	Have you ever u	sed a fire extin	guisher to put out a fire?
	Yes	No	Not Sure
16. l	Have you ever b	een trained on	how to properly use a fire extinguisher?
	Yes	No	Not Sure
17. 1	Have you ever b	een trained in f	first aid?
	Yes	No	Not Sure
18. l	Do you think fir	st aid training s	should be a part of the training program?
	Yes	No	Not Sure
	•	_	ff should receive fire prevention, protection being employed?
	Yes	No	Not Sure
20.	Would you be w	rilling to go thro	ough a fire training certification program?
	Yes	No	Maybe

Appendix B (Results from 473 nightclub staff) Nightclub Staff Survey

Please answer the following questions based on your experience. Your answers will help train future nightclub staff in fire prevention, protection and suppression activities.

1. Are you? Male **211** Female **262** 2. Are you employed? Full-time 308 Part-time 165 3. How many years have you been employed at the nightclub? 1 to 5 **414** 6 to 11 **36** 12 to 15 **18** over 16 **5** 4. What is your age group? 18-25 **243** 26-30 **117** 31-35 **67** 36-40 **24** over 40 **22** 5. What is your current position? Bartender 113 Doorman 29 Server <u>162</u> Cook 43 Manager 63 Other 63 6. Does the nightclub have an emergency action plan? Yes **165** No **71** Not Sure 237 7. Do you know the location of your buildings fire alarm panel? Yes 254 Not Sure 106 No 113 8. Do you know how to use the buildings fire alarm system? Yes 226 No **162** Not Sure 86 9. Does your building have a sprinkler system?

10. Have you ever heard the sound/signaling method of the fire evacuation alarm?

Not Sure **108**

Yes **172** No 242 Not Sure <u>59</u>

No 117

Yes **248**

11. Are you fami	liar with at least t	wo alternative exits?
Yes <u>440</u>	No <u>20</u>	Not Sure <u>13</u>
12. Have you eve	er been involved i	n an emergency evacuation drill on the job?
Yes <u>80</u>	No <u>385</u>	Not Sure <u>8</u>
13. Have you eve	er been trained on	how to conduct an emergency evacuation?
Yes <u>139</u>	No <u>317</u>	Not Sure <u>17</u>
14. Does the staff	f gather at a certain	in location following an emergency evacuation?
Yes <u>110</u>	No <u>163</u>	Not Sure <u>200</u>
15. Have you eve	er used a fire extir	nguisher to put out a fire?
Yes <u>219</u>	No <u>251</u>	Not Sure <u>3</u>
16. Have you eve	er been trained on	how to properly use a fire extinguisher?
Yes <u>263</u>	No <u>205</u>	Not Sure <u>5</u>
17. Have you eve	er been trained in	first aid?
Yes <u>306</u>	No <u>161</u>	Not Sure <u>6</u>
18. Do you think	first aid training	should be a part of the training program?
Yes <u>316</u>	No <u>149</u>	Not Sure 8
•	•	aff should receive fire prevention, protection g before being employed?
Yes <u>304</u>	No <u>103</u>	Not Sure <u>66</u>
20. Would you be	e willing to go thr	rough a fire training certification program?
Yes <u>312</u>	No <u>54</u>	Maybe <u>107</u>

Appendix C (Results from 113 bartenders) Nightclub Staff Survey

Please answer the following questions based on your experience. Your answers will help train future nightclub staff in fire prevention, protection and suppression activities.

1.	Are you? Male 3	<u>85</u> Femal	e <u>78</u>		
2.	Are you employed	1?			
	Full-time 66	Part-time 47			
3.	How many years h	nave you been o	employed at the	nightclub?	
	1 to 5 94	6 to 11 9	12 to 15 8	over 16 <u>2</u>	
4.	What is your age g	group?			
	18-25 <u>46</u>	26-30 <u>52</u>	31-35 <u>11</u>	36-40 <u>2</u>	over 40 <u>2</u>
5.	What is your curre	nt position?			
	Bartender $\underline{\mathbf{X}}$	Doorn	nan	Server	
	Cook	Manag	ger	Other	
6.	Does the nightclub	have an emerg	gency action pla	an?	
	Yes <u>37</u>	No <u>20</u>	Not Sure <u>56</u>		
7.	Do you know the l	ocation of you	r buildings fire	alarm panel?	
	Yes <u>61</u>	No <u>20</u>	Not Sure <u>32</u>		
8.	Do you know how	v to use the bui	ldings fire aları	n system?	
	Yes <u>57</u>	No <u>39</u>	Not Sure <u>17</u>		
9.	Does your building	ig have a sprink	kler system?		
	Yes <u>52</u>	No <u>35</u>	Not Sure <u>26</u>		
10	. Have you ever he	ard the sound/s	ignaling metho	d of the fire eva	acuation alarm?
	Yes <u>39</u>	No <u>59</u>	Not Sure <u>15</u>		

11. Are you familiar with at least two alternative exits?								
Yes <u>103</u>	No <u>8</u>	Not Sure 2						
12. Have you ever been involved in an emergency evacuation drill on the job?								
Yes <u>22</u>	No <u>89</u>	Not Sure 2						
13. Have you ever been trained on how to conduct an emergency evacuation?								
Yes <u>37</u>	No <u>73</u>	Not Sure <u>3</u>						
14. Does the staff gather at a certain location following an emergency evacuation?								
Yes <u>26</u>	No <u>43</u>	Not Sure <u>44</u>						
15. Have you ever used a fire extinguisher to put out a fire?								
Yes <u>49</u>	No <u>64</u>	Not Sure 0						
16. Have you ever been trained on how to properly use a fire extinguisher?								
Yes <u>68</u>	No <u>44</u>	Not Sure <u>1</u>						
17. Have you ever been trained in first aid?								
Yes <u>81</u>	No <u>32</u>	Not Sure 0						
18. Do you think first aid training should be a part of the training program?								
Yes <u>72</u>	No <u>27</u>	Not Sure <u>14</u>						
19. Do you think that nightclub staff should receive fire prevention, protection and suppression training before being employed?								
Yes <u>150</u>	No <u>39</u>	Not Sure <u>24</u>						
20. Would you be willing to go through a fire training certification program?								
Yes <u>77</u>	No <u>14</u>	Maybe <u>22</u>						

Appendix D (Results from 43 cooks) Nightclub Staff Survey

Please answer the following questions based on your experience. Your answers will help train future nightclub staff in fire prevention, protection and suppression activities.

? Male :	<u>37</u> 1	Female	e <u>6</u>						
employed	1?								
Full-time <u>34</u> Part-time <u>9</u>									
ny years l	nave you l	been e	mployed a	t the	nightclub?				
5 <u>41</u>	6 to 11	<u>2</u>	12 to 15	<u>0</u>	over 16 <u>0</u>				
4. What is your age group?									
5 <u>17</u>	26-30 9	<u> </u>	31-35 <u>11</u>		36-40 <u>3</u>	over 40 <u>3</u>			
our curre	nt positio	n?							
Bartender Doorn			an		Server				
Cook <u>X</u> Manager			er		Other				
nightclub	have an e	emerge	ency action	n pla	n?				
<u>18</u>	No <u>6</u>		Not Sure 19						
7. Do you know the location of your buildings fire alarm panel?									
<u>27</u>	No <u>10</u>		Not Sure	<u>6</u>					
now how	to use th	e build	dings fire a	larm	system?				
<u>27</u>	No <u>10</u>		Not Sure	<u>6</u>					
ur buildir	ng have a	sprink	ler system	?					
<u>31</u>	No <u>7</u>		Not Sure	<u>5</u>					
u ever he	ard the so	ound/si	gnaling m	etho	d of the fire ev	vacuation alarm?			
<u>15</u>	No <u>22</u>		Not Sure	<u>6</u>					
	employed time 34 my years 1 my ye	employed? Itime 34 Part-time any years have you so 41 6 to 11 your age group? It is 41 6 to 11 your age group? It is 42 26-30 9 our current position ender in the location of the loc	employed? Itime 34 Part-time 9 Iny years have you been early years have you group? It is a year years have you been early years have you group? It is a year years have you been early years have you have an emergence where you have an emergence year. It is a year years have you been early years have you have an emergence year. It is a year years have you been early years have you have an emergence year. It is a year years have you been early years have you have an emergence year. It is a year years have you been early years have you have an emergence year. It is a year years have you been early years have you have you have an emergence year. It is a year years have you been early years have you have you have an emergence year. It is a year years have you been early years have you have you have an emergence year. It is a year year years have you been early years have you have you have an emergence year. It is a year year years have you been early years have you have	retime 34 Part-time 9 ray years have you been employed a set of to 11 2 12 to 15 9 your age group? 5 17 26-30 9 31-35 11 our current position? ender Doorman x X Manager raightclub have an emergency action 18 No 6 Not Sure throw the location of your buildings 27 No 10 Not Sure throw how to use the buildings fire a 27 No 10 Not Sure ur building have a sprinkler system 31 No 7 Not Sure u ever heard the sound/signaling materials.	employed? Itime 34 Part-time 9 In years have you been employed at the state of th	employed? Atime 34 Part-time 9 The system 12 Part-time 9 The system 14 Part-time 9 The system 15 Part-time 9 The system 15 Part-time 9 The system 16 Part-time 9 The system 17 Part-time 9 The system 16 Part-time 16 Part			

11. A	re you familiar	with at least tw	o alternative exits?
	Yes <u>42</u>	No <u>1</u>	Not Sure <u>0</u>
12. H	ave you ever be	en involved in	an emergency evacuation drill on the job?
	Yes <u>13</u>	No <u>30</u>	Not Sure <u>0</u>
13. H	ave you ever be	en trained on h	ow to conduct an emergency evacuation?
	Yes <u>17</u>	No <u>25</u>	Not Sure <u>1</u>
14. D	oes the staff gat	her at a certain	location following an emergency evacuation
	Yes <u>17</u>	No <u>9</u>	Not Sure <u>17</u>
15. H	ave you ever us	ed a fire exting	uisher to put out a fire?
	Yes <u>29</u>	No <u>14</u>	Not Sure <u>0</u>
16. H	ave you ever be	en trained on h	ow to properly use a fire extinguisher?
	Yes <u>26</u>	No <u>17</u>	Not Sure <u>0</u>
17. H	ave you ever be	en trained in fi	rst aid?
	Yes <u>23</u>	No <u>19</u>	Not Sure <u>1</u>
18. De	o you think firs	t aid training sh	ould be a part of the training program?
	Yes <u>26</u>	No <u>10</u>	Not Sure <u>8</u>
19. D	-	_	should receive fire prevention, protection before being employed?
	Yes <u>19</u>	No <u>9</u>	Not Sure <u>15</u>
20. W	ould you be wi	lling to go thro	ugh a fire training certification program?
	Yes <u>26</u>	No <u>4</u>	Maybe <u>13</u>

Appendix E (Results from 29 doorman) Nightclub Staff Survey

1.	Are you? Male?	<u>29</u> Fema	le <u>0</u>		
2.	Are you employed	1?			
	Full-time <u>11</u>	Part-time <u>18</u>			
3.	How many years l	have you been	employed at th	e nightclub?	
	1 to 5 <u>28</u>	6 to 11 <u>1</u>	12 to 15 0	over 16 <u>0</u>	
4.	What is your age	group?			
	18-25 <u>14</u>	26-30 6	31-35 <u>6</u>	36-40 2	over 40 <u>1</u>
5.	What is your curre	nt position?			
	Bartender	Door	man <u>X</u>	Server	
	Cook	_ Mana	iger	Other	
6. Does the nightclub have an emergency action plan?					
	Yes <u>13</u>	No <u>7</u>	Not Sure 9		
7.	Do you know the	e location of yo	our buildings fi	re alarm panel?	
	Yes <u>18</u>	No <u>7</u>	Not Sure 4		
8.	Do you know how	w to use the bu	aildings fire alar	rm system?	
	Yes <u>14</u>	No <u>13</u>	Not Sure 2		
9.	Does your building	ng have a sprin	nkler system?		
	Yes <u>20</u>	No <u>7</u>	Not Sure 2		
10	. Have you ever he	ard the sound/	signaling methor	od of the fire ev	vacuation alarm?
	Yes <u>13</u>	No <u>14</u>	Not Sure 2		

11. A	re you familiar	with at least tw	o alternative exits?
	Yes <u>28</u>	No <u>0</u>	Not Sure 1
12. H	ave you ever be	een involved in	an emergency evacuation drill on the job?
	Yes <u>5</u>	No <u>24</u>	Not Sure <u>0</u>
13. H	ave you ever be	een trained on h	now to conduct an emergency evacuation?
	Yes <u>12</u>	No <u>16</u>	Not Sure 1
14. D	oes the staff ga	ther at a certain	location following an emergency evacuation?
	Yes <u>7</u>	No <u>13</u>	Not Sure 9
15. H	ave you ever us	sed a fire exting	guisher to put out a fire?
	Yes <u>23</u>	No <u>6</u>	Not Sure <u>0</u>
16. H	ave you ever be	een trained on h	now to properly use a fire extinguisher?
	Yes <u>23</u>	No <u>6</u>	Not Sure <u>0</u>
17. H	ave you ever be	een trained in fi	rst aid?
	Yes <u>24</u>	No <u>5</u>	Not Sure <u>0</u>
18 D	o vou think fire	t aid training cl	nould be a part of the training program?
10. D	o you tillik ilis	t aid training si	ionid be a part of the training program:
	Yes <u>23</u>	No <u>4</u>	Not Sure 2
19. D	•	_	f should receive fire prevention, protection before being employed?
	Yes <u>12</u>	No <u>11</u>	Not Sure <u>6</u>
20. W	ould you be wi	lling to go thro	ugh a fire training certification program?
	Yes <u>21</u>	No <u>2</u>	Maybe 6

Appendix F (Results from 63 managers) Nightclub Staff Survey

1.	Are you? Male	<u>49</u> Fema	le <u>14</u>		
2.	Are you employed	d?			
	Full-time <u>63</u>	Part-time 0			
3.	How many years	have you been	employed at th	e nightclub?	
	1 to 5 45	6 to 11 <u>12</u>	12 to 15 4	over 16 <u>2</u>	
4.	What is your age	group?			
	18-25 <u>14</u>	26-30 <u>14</u>	31-35 <u>22</u>	36-40 8	over 40 <u>5</u>
5.	What is your curre	ent position?			
	Bartender	Door	man	Server	
	Cook	_ Mana	$\underline{\mathbf{X}}$	Other	
6.	Does the nightclub	have an emer	gency action pl	an?	
	Yes <u>29</u>	No <u>17</u>	Not Sure <u>17</u>		
7.	Do you know the	location of yo	ur buildings fir	e alarm panel?	
	Yes <u>48</u>	No <u>7</u>	Not Sure 8		
8.	Do you know how	w to use the bu	ildings fire alaı	rm system?	
	Yes <u>47</u>	No <u>8</u>	Not Sure 8		
9.	Does your building	ng have a sprin	ıkler system?		
	Yes <u>38</u>	No <u>18</u>	Not Sure 7		
10	. Have you ever he	eard the sound/	signaling methor	od of the fire ev	vacuation alarm?
	Yes <u>33</u>	No <u>27</u>	Not Sure 3		

11. A	re you familiar	with at least tw	o alternative exits?
	Yes <u>62</u>	No <u>1</u>	Not Sure <u>0</u>
12. Ha	ave you ever be	en involved in	an emergency evacuation drill on the job?
	Yes <u>15</u>	No <u>47</u>	Not Sure <u>1</u>
13. Ha	ave you ever be	en trained on h	ow to conduct an emergency evacuation?
	Yes <u>24</u>	No <u>38</u>	Not Sure <u>1</u>
14. De	oes the staff gat	her at a certain	location following an emergency evacuation?
	Yes <u>18</u>	No <u>32</u>	Not Sure <u>13</u>
15. Ha	ave you ever us	ed a fire exting	uisher to put out a fire?
	Yes <u>37</u>	No <u>26</u>	Not Sure <u>0</u>
16. H	ave you ever be	en trained on h	ow to properly use a fire extinguisher?
	Yes <u>45</u>	No <u>18</u>	Not Sure <u>0</u>
17. H	ave you ever be	en trained in fi	rst aid?
	Yes <u>38</u>	No <u>25</u>	Not Sure <u>0</u>
18. De	o you think firs	t aid training sh	nould be a part of the training program?
	Yes <u>44</u>	No <u>12</u>	Not Sure 7
19. De	•	_	should receive fire prevention, protection before being employed?
	Yes <u>37</u>	No <u>18</u>	Not Sure <u>8</u>
20. W	ould you be wi	lling to go thro	ugh a fire training certification program?
	Yes <u>55</u>	No <u>2</u>	Maybe <u>6</u>

Appendix G (Results from 162 servers) Nightclub Staff Survey

1.	Are you? Male	<u>17</u> Fema	ale <u>145</u>		
2.	Are you employed	d?			
	Full-time <u>93</u>	Part-time 70			
3.	How many years	have you been	employed at th	e nightclub?	
	1 to 5 <u>154</u>	6 to 11 <u>5</u>	12 to 15 <u>3</u>	over 16 0	
4.	What is your age	group?			
	18-25 <u>127</u>	26-30 <u>24</u>	31-35 8	36-40 <u>1</u>	over 40 <u>2</u>
5. V	What is your curre	ent position?			
	Bartender	_ Door	man	Server X	
	Cook	_ Mana	ager	Other	
6. I	Does the nightclub have an emergency action			an?	
	Yes <u>44</u>	No <u>13</u>	Not Sure <u>105</u>	5	
7.	Do you know the	location of yo	our buildings fir	e alarm panel?	
	Yes <u>63</u>	No <u>56</u>	Not Sure <u>43</u>		
8.	Do you know ho	w to use the bu	uildings fire alar	rm system?	
	Yes <u>51</u>	No <u>69</u>	Not Sure <u>42</u>		
9.	Does your buildi	ng have a sprir	nkler system?		
	Yes <u>72</u>	No <u>25</u>	Not Sure <u>65</u>		
10.	Have you ever he	eard the sound	signaling meth	od of the fire ex	vacuation alarm?
	Yes <u>42</u>	No <u>91</u>	Not Sure <u>29</u>		

11. Are you familiar with at least two alternative exits?				
	Yes <u>150</u>	No <u>7</u>	Not Sure <u>5</u>	
12. Ha	ave you ever be	en involved in	an emergency evacuation drill on the job?	
	Yes <u>12</u>	No <u>148</u>	Not Sure 2	
13. Ha	ave you ever be	en trained on h	ow to conduct an emergency evacuation?	
	Yes <u>28</u>	No <u>126</u>	Not Sure <u>8</u>	
14. Do	oes the staff gat	her at a certain	location following an emergency evacuation	
	Yes <u>24</u>	No <u>53</u>	Not Sure <u>85</u>	
15. Ha	ave you ever us	ed a fire exting	uisher to put out a fire?	
	Yes <u>45</u>	No <u>115</u>	Not Sure 2	
16. Ha	ave you ever be	en trained on h	ow to properly use a fire extinguisher?	
	Yes <u>60</u>	No <u>100</u>	Not Sure 2	
17. Ha	ave you ever be	en trained in fi	rst aid?	
	Yes <u>98</u>	No <u>62</u>	Not Sure <u>3</u>	
18. Do	o you think firs	t aid training sh	ould be a part of the training program?	
	Yes <u>90</u>	No <u>46</u>	Not Sure <u>26</u>	
19. Do	•	•	should receive fire prevention, protection before being employed?	
	Yes <u>67</u>	No <u>59</u>	Not Sure <u>36</u>	
20. W	ould you be wi	lling to go thro	ugh a fire training certification program?	
	Yes <u>86</u>	No <u>28</u>	Maybe <u>48</u>	

Appendix H (Results from 63 other category) Nightclub Staff Survey

1.	Are you? Male	<u>44</u> Fema	ale <u>19</u>		
2	Are you employe	d?			
	Full-time <u>42</u>	Part-time 21			
3.]	How many years	have you been	employed at th	e nightclub?	
	1 to 5 <u>52</u>	6 to 11 <u>7</u>	12 to 15 <u>3</u>	over 16 <u>1</u>	
4. `	What is your age	group?			
	18-25 <u>25</u>	26-30 <u>12</u>	31-35 9	36-40 8	over 40 9
5. V	What is your curre	ent position?			
	Bartender	_ Door	rman	Server	
	Cook	_ Man	ager	Other $\underline{\mathbf{X}}$	
6. I	Does the nightclub have an emergency action			lan?	
	Yes <u>24</u>	No <u>8</u>	Not Sure <u>31</u>		
7.	Do you know the	e location of yo	our buildings fir	e alarm panel?	
	Yes <u>37</u>	No <u>13</u>	Not Sure <u>13</u>		
8.	Do you know ho	w to use the bu	uildings fire ala	rm system?	
	Yes <u>30</u>	No <u>22</u>	Not Sure <u>11</u>		
9.	Does your buildi	ng have a spri	nkler system?		
	Yes <u>36</u>	No <u>25</u>	Not Sure 2		
10.	Have you ever he	eard the sound	/signaling meth	od of the fire ev	vacuation alarm?
	Yes <u>30</u>	No <u>30</u>	Not Sure 3		

11. Are you familiar with at least two alternative exits?				
	Yes <u>56</u>	No <u>3</u>	Not Sure 4	
12. Ha	ave you ever be	en involved in	an emergency evacuation drill on the job?	
	Yes <u>11</u>	No <u>50</u>	Not Sure 2	
13. Ha	ave you ever be	en trained on h	ow to conduct an emergency evacuation?	
	Yes <u>19</u>	No <u>42</u>	Not Sure 2	
14. Do	oes the staff gat	her at a certain	location following an emergency evacuation?	
	Yes <u>15</u>	No <u>16</u>	Not Sure <u>32</u>	
15. Ha	ave you ever us	ed a fire exting	uisher to put out a fire?	
	Yes <u>36</u>	No <u>27</u>	Not Sure <u>0</u>	
16. Ha	ave you ever be	en trained on h	ow to properly use a fire extinguisher?	
	Yes <u>41</u>	No <u>21</u>	Not Sure <u>1</u>	
17. Ha	ave you ever be	en trained in fi	rst aid?	
	Yes <u>42</u>	No <u>20</u>	Not Sure 1	
18. Do	o you think firs	t aid training sh	nould be a part of the training program?	
	Yes <u>49</u>	No <u>4</u>	Not Sure <u>10</u>	
19. Do	•	•	f should receive fire prevention, protection before being employed?	
	Yes <u>33</u>	No <u>15</u>	Not Sure <u>15</u>	
20. W	ould you be wi	lling to go thro	ugh a fire training certification program?	
	Yes <u>47</u>	No <u>3</u>	Maybe <u>13</u>	

Appendix I Nightclubs Surveyed

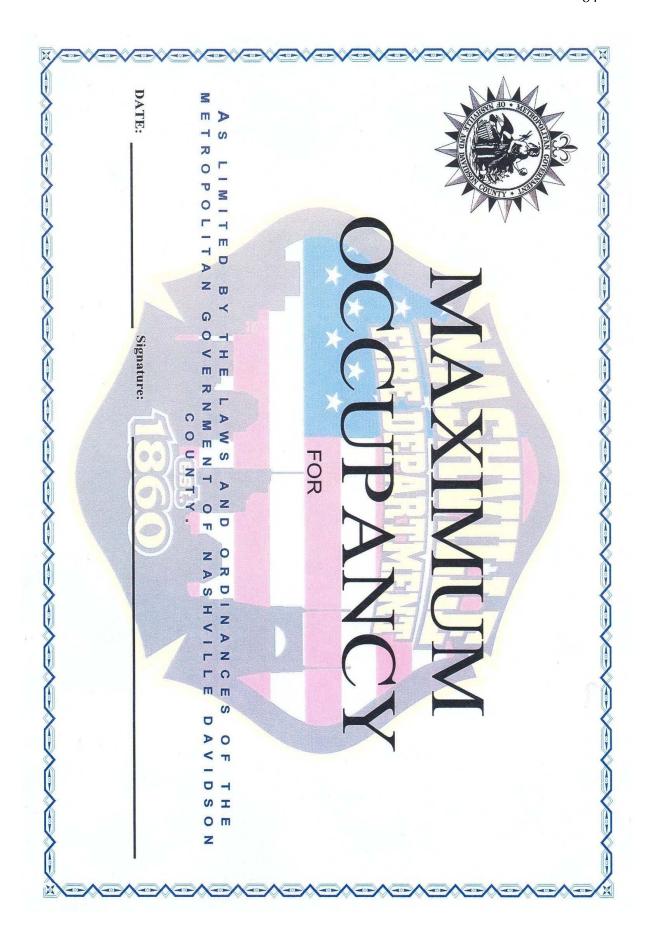
Nightclubs	Occupancy Load	Staff
1. Bailey's Pub & Grill	265	41
2. Bailey's Sports Grill	200	31
3. Bar of Nashville	320	21
4. Broadway Brewhouse	155	22
5. Buffalo Billards	913	27
6. Corner Pub	90	11
7. Dan McGuiness	150	36
8. Graham Central Station	1303	36
9. Hooters	287	41
10. Hooters-South	275	62
11. Hurricans	612	22
12. Jillians	3000	175
13. Johnathans Grille	299	21
14. Legends Corner	175	24
15. Mafiaoza's	175	33
16. Red Door Saloon	115	11
17. Rippy's	150	26
18. Roberts Western World	175	16
19. Sam's Sports Bar & Grill	193	24
20. Silverado Saloon	299	22
21. South Street	190	24
22. Spring Water	50	4
23. The Beer Sellar	185	11
24. The Box Seat	265	28
25. The Stage	230	18
26. The Tin Roof	200	17
27. Tootsie's Orchid Lounge	207	16
28. Two Doors Down	283	21
29. Western Room	50	9
30. Wildhorse Saloon	1440	175

Appendix J **NASHVILLE FIRE DEPARTMENT**

FIRE SAFETY SURVEY PLACES OF ASSEMBLY-NIGHT CLUBS

Brief definition of a place of assembly: Assigned Occupant Load of 50 or better

INFORMATION TO OBTAIN:
Name of Business:
Address:
Phone Number of Business:
Owners Name:
Owners Day Time Phone Number:
Managers Name:
Managers Day Time Phone Number:
ITEMS TO LOOK FOR AND CHECK:
Blocked or Locked Exits Yes No
Both inside and outside
Number of Exits Without going through Kitchen
Do Exit Doors Swing to the Outside Yes No
Open Flames (candles, cooking devices, etc) Yes No
Portable Fire Extinguishers Yes No Month and Year on Tag.
Lit Exit Signs Yes No
Emergency Lighting Yes No
Extension Cords Yes No
Pyro/Fireworks being used Yes No



Appendix L Certification Statement

I hereby certify that this paper constitutes my own product, that where the language of
others is set forth, quotation marks so indicate, and that appropriate credit is given where
I have used the language, ideas, expressions, or writings of another.

Signed:		 	